

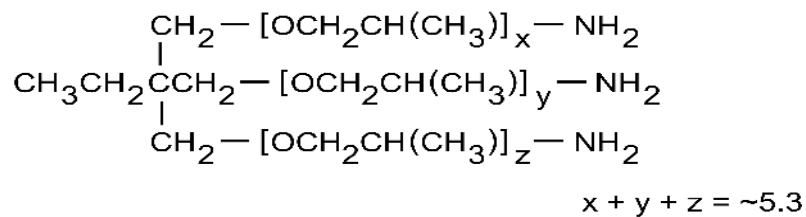


EPIKURE™ Curing Agent 3233

RP: 4062

Issued: June 2005

Introduction EPIKURE™ Curing Agent 3233 is an unmodified, T403-type polyoxypropylenetriamine that has moderate reactivity, low viscosity, low color, low vapor pressure and high primary amine content. It resists “blush”, “bloom” and “sweat-out” in epoxy compositions. EPIKURE Curing Agent 3233 is a trifunctional primary amine curing agent with the idealized chemical structure shown below.



- Features**
- low viscosity and low vapor pressure
 - light color and improved color retention compared to conventional amine-cured epoxy systems
 - long pot life
 - improved flexibility and good impact resistance

- Suggested Uses**
- Composites (Fiber reinforced products)
 - General purpose casting and encapsulation
 - Adhesive compounds
 - Glaze and sealer high-build coatings

Property	Test Method	Unit	Value
Brookfield Viscosity, @ 25°C	ASTM D2196	cP	~ 70
Amine Value	ASTM D2896	mg KOH/g	343 - 370
Amine Hydrogen Eq. Wt.			81
Color, Pt-Co	ASTM D1209		50 max.
Weight per Gallon, cup	ASMT D1475	lbs/gal	8.2

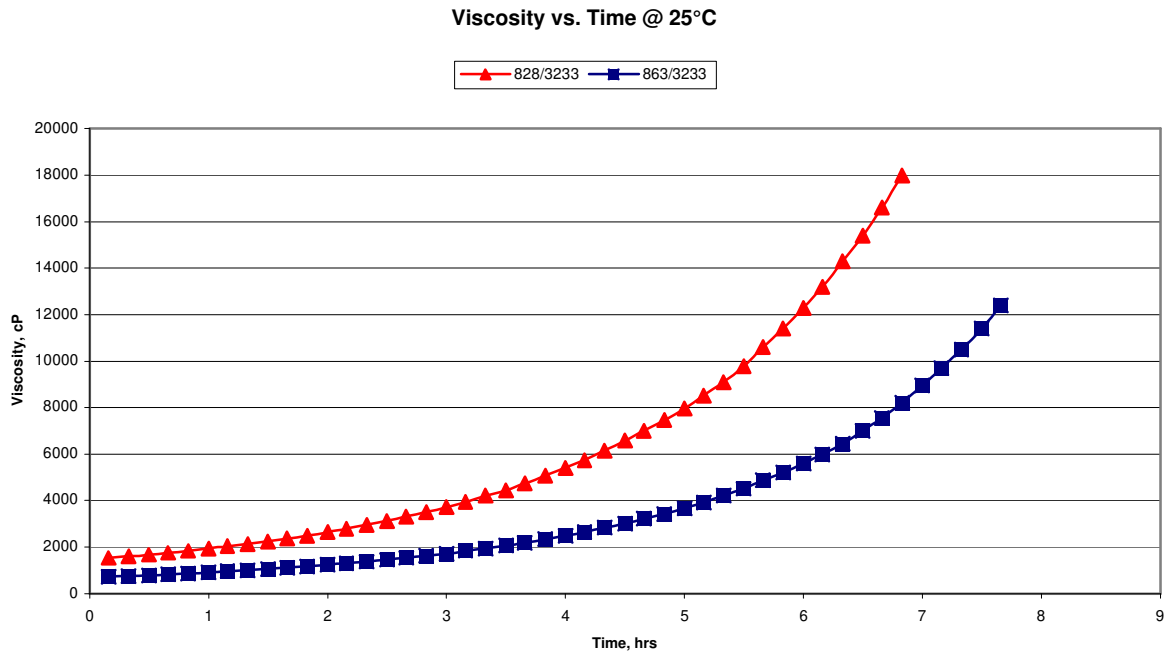
General Information EPIKURE Curing Agent 3233 is an effective curing agent for most types of epoxy resin. It is compatible with modified epoxy resin blends and conventional bisphenol-A and bisphenol-F epoxy resins. Table 1 lists the cured state and handling properties

EPIKURE Curing Agent 3233 is compatible and can be used in combination with most amine curing agents (e.g. aliphatic and cycloaliphatic amines) and a wide range of modifiers (e.g. nonylphenol) to adjust handling characteristics or cured state properties.

EPIKURE Curing Agent 3233 can be cured at room temperature or heat cured. Usually accelerators (e.g., EPIKURE 3253 or EPIKURE 3234) are added to speed room temperature cures.

Clean-out of EPIKURE 3233 in transfer lines and equipment can be accomplished with hot water and steam since it is a water-soluble amine.

Performance Properties Graph 1 / Viscosity vs. Time at 25°C of EPON Resin 828 & 863 cured with EPIKURE Curing Agent 3233



Performance Properties Table 1 / Physical Properties of EPON Resin 828 & 863 cured with EPIKURE Curing Agent 3233

	Method	Units	A	B
Composition (parts by weight)				
EPON Resin 828		pbw	100	
EPON Resin 863		pbw		100
EPIKURE Curing Agent 3233		pbw	43	48
Handling Properties				
Gel time, 100 g mass @ 25°C	Shyodu	hrs	8.7	9.5
Gel time @ 150°C	Hot Plate	min.	2.0	1.8
Initial Viscosity @ 25°C	ASTM D2196	cP	150	720
Pot Life, ¹ @ 25°C	ASTM D2196	hrs	2.5	2.5
Cure Schedule		hrs / °C (°F)	2 / 80 (176) 3 / 125 (257)	
Cured State Properties				
Casting Density		g/cc		
Tg by DSC	ASTM D-3418	°C	90	82
Heat Deflection Temperature	ASTM D-648	°C	79	66
Hardness	ASTM D-2240	Shore D	85 – 87	85 - 87
Tensile				
Yield Strength	ASTM D-638	psi	8,310	8,870
Yield Elongation		%	5.6	4.1
Break Strength		psi	7,980	7,890
Break Elongation		%	8.4	7.8
Modulus		ksi	400	452
Flexural				
Strength	ASTM D-790	psi	14,730	16,060
Modulus		ksi	441	502

¹ Time to double initial viscosity

Storage EPIKURE Curing Agent 3233 should be stored in a tightly sealed, completely-filled containers of metal, glass, or polyolefin plastic at normal room temperatures. The curing agent may darken during long term storage, the extent of color formation depending on storage temperature and exposure to air.

For detailed storage and minimum shelf life information, please refer the “Shelf Life” section of our website at www.hexionchem.com

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